

(b) contacting said cell with a candidate compound; and

(c) measuring said activity, wherein a decrease in said activity, relative to the activity of the endocytic pathway in a cell expressing the recombinant nucleic acid but not contacted with the candidate compound, identifies the candidate compound as a compound that is useful for the treatment of Alzheimer's disease.

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17. (Amended) The method of claim 16, wherein said activity of the endocytic pathway is selected from the group consisting of endosomal fusion, endosomal recycling, expression of MPR46, accumulation of lysosomal hydrolases in early endosomes, and accumulation of A β in early endosomes.

22. (Amended) A method for identifying a candidate compound as a compound that is useful for the treatment of Alzheimer's disease, said method comprising the steps of:

(a) providing a cell expressing a recombinant rab5 nucleic acid that increases activity of the endocytic pathway;

(b) contacting said cell with a candidate compound; and

(c) measuring A β formation, wherein a decrease in A β formation, relative to A β formation by a cell expressing the recombinant nucleic acid but not contacted with the candidate compound, identifies the candidate compound as a compound that is useful for the treatment of Alzheimer's disease.

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27. (Amended) A method for identifying a candidate compound as a compound that is useful for the treatment of Alzheimer's disease, said method comprising the steps of:

(a) providing a mouse expressing a transgene comprising a recombinant rab5 nucleic acid that increases activity of the endocytic pathway;

(b) administering a candidate compound to said mouse; and

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cont (c) measuring said activity, wherein a decrease in said activity, relative to activity in a mouse expressing said transgene but not contacted with said candidate compound, identifies the candidate compound as a compound that is useful for the treatment of Alzheimer's disease.

30. (Amended) A method for identifying a candidate compound as a compound that is useful for the treatment of Alzheimer's disease, said method comprising the steps of:

(a) providing a mouse expressing a transgene comprising a recombinant rab5 nucleic acid that increases activity of the endocytic pathway;

(b) administering a candidate compound to said mouse; and

A4 (c) measuring A β formation, wherein a decrease in said A β formation, relative to A β formation in a mouse expressing said transgene but not contacted with said candidate compound, identifies the candidate compound as a compound that is useful for the treatment of Alzheimer's disease.

35. (Amended) The method of claim 34, wherein said mouse is a Tn65Dn mouse that increases activity of the endocytic pathway.
